

# Utilities Department Update

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CITY COUNCIL STUDY SESSION – October 8, 2024



## Administrative Team



Scott Olsen, CFM  
**Director**



Emily Meek  
**Assistant  
Director**



Liz Escatel  
**Administrative  
Assistant**

## Leadership Team



**Cody Henry**  
**Maintenance**  
**Operations**  
**Manager**



**Anna Sparks, PE**  
**Engineering**  
**Manager**



**Rachel Mertens**  
**Stormwater &**  
**Environmental**  
**Manager**



**Jordan Anderson**  
**Water Treatment**  
**Plant Manager**



**Austin Creswell, PE**  
**Water Resource**  
**Manger**

## New Addition!



Sherry Scaggiari  
**Water Quality  
Compliance  
Coordinator**

## Utilities by the Numbers

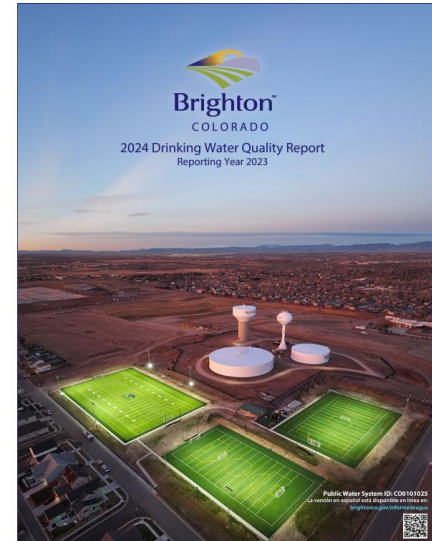
- 10 wells
- 5 storage tanks = 18.5 million gallons storage
- 14 MGD Water Treatment Plant
- 665 miles of pipeline
- 320 miles of potable water lines
- 198 miles of sewer lines
- 114 miles of stormwater pipelines
- 31 miles of raw water conveyance pipelines





## Defining Our Mission and Vision

- Branding
- New Strategic Plan
- Investing in Customer Outreach





## Connecting With Our Valued Employees

- Bi-annual department meetings
- End of year celebrations
- In-house training program
  - ✓ Shadowing
  - ✓ Monthly trainings
  - ✓ Other growth opportunities

## Staffing Now and Into the Future

	2024	2025	2026
FTEs	47	48	54

- As the City continues to rapidly grow, we will need to continue to add staff to provide adequate service levels and response times



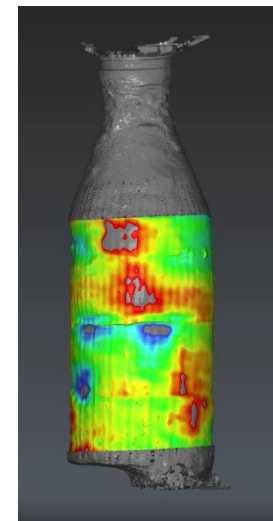
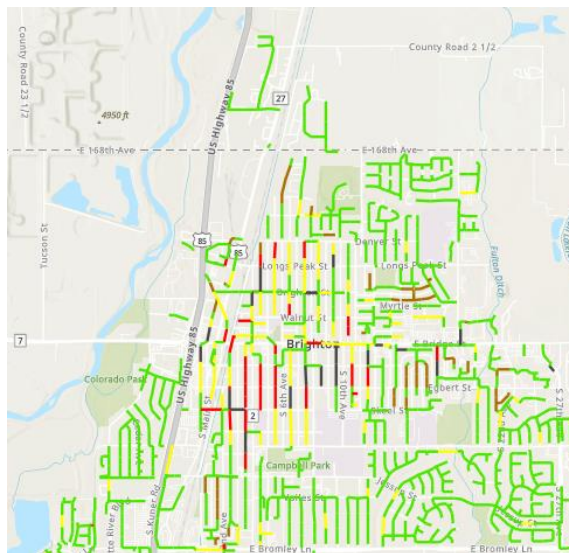
## Utilities Maintenance Operations – 2024 Water Statistics

- Water main breaks repaired- 7
- Service line leaks repaired- 6
- On-call afterhours responses- 207
- Meters-
  - ✓ 356 old meters replaced
  - ✓ 413 new meters set
- Utility billing service orders- 1,696
- Fire hydrants serviced- 413
- Water valves exercised- 283



## Utilities Maintenance Operations - 2024 Sewer Statistics

- Sewer pipes cleaned- 107,671 linear feet
- CCTV inspected- 9,872 linear feet
- Acoustic soundwave score:
  - ✓ 91% of our pipes are clean.
  - ✓ 9% need to be cleaned.
- Manholes inspected- 1,210



## Utilities Maintenance Operations – 2024 Backflow, Locates and Staffing Statistics

- 1,898 Backflow assemblies are active
  - ✓ 465 of them are irrigation backflows
- 14,024 locate tickets
- 13 Maintenance Operators
- 1 Administrative Assistant



## Utilities Engineering

### Guiding the City's waters through health and sustainability

- Reviews all capital projects and development utilities
- Host citizens public meeting open houses for capital projects
- Provide monthly in-service trainings for staff
- Professional development including conference attendance
- Encourage Professional Engineer EI testing for advancement
- In-house feasibility studies and design (i.e., standard details refresh and update, dump station, legal descriptions/exhibits)

## Utilities Engineering

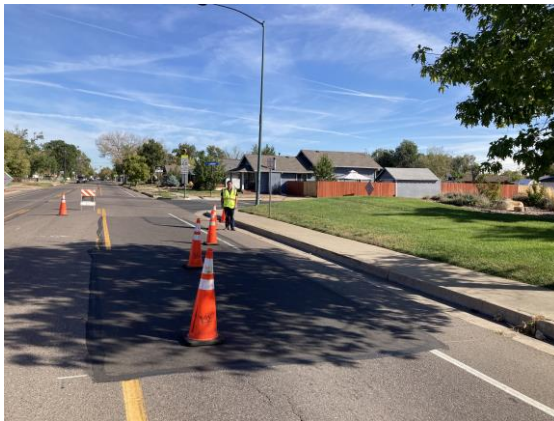
➤ Project Managers for the City's capital projects from design to construction including the following:

- ✓ Ken Mitchell to Beebe Draw Pump House Rehab
- ✓ Lupton Meadows Reservoir Design
- ✓ Water Master Plan with Future Forecasting
- ✓ SACWSD Disconnection - Shiraba Park and 112th Ave  
Water
- ✓ 18th Ave Sanitary Sewer Rerouting
- ✓ 10th and Midland Storm Improvements

## Utilities Engineering Capital Projects



**Lutz Reservoir  
Sustainable  
Irrigation System**



**Core City Phase III  
Waterline Replacement**



**South Outfall Phase II  
Culverts  
Flood Control**

## Stormwater and Environmental

- As of September 17th:
  - ✓ 64 active Erosion and Sediment Control (ESC) permits
  - ✓ 915 Inspections and 80 enforcement actions taken
- Education and Outreach:
  - ✓ Children's Water Festival, Adams County Career Expo and education videos
- Illicit Discharge Detection and Prevention: 8 Illicit Discharges



## Stormwater and Environmental

### ➤ Upcoming Projects:

- ✓ Jacob's Run Drainage Channel
- ✓ South Outfall Study, Maintenance, and Construction





## Water Treatment

- RO Water Treatment Plant 7.59 MGD
- Treating 6 South Platte Alluvial Wells for Nitrates
- Greensand Direct Filtration Plant 5.98 MGD
- Treating 4 Beebe Draw Alluvial Wells for High Manganese

## Consecutive Connections

- Thornton Connection 1.8-2.2 MGD
- Denver Water Connection 0.5 MGD

# Water Treatment Staffing and Staffing Challenges

## ➤ Operations

- ✓ 1 Chief Plant Operator
- ✓ 6 Water Treatment Plant Operators (A-D)

## ➤ Maintenance

- ✓ 1 Water Treatment Maintenance Supervisor
- ✓ 5 Plant Mechanics
- ✓ 1 Assistant Plant Mechanic

## ➤ SCADA

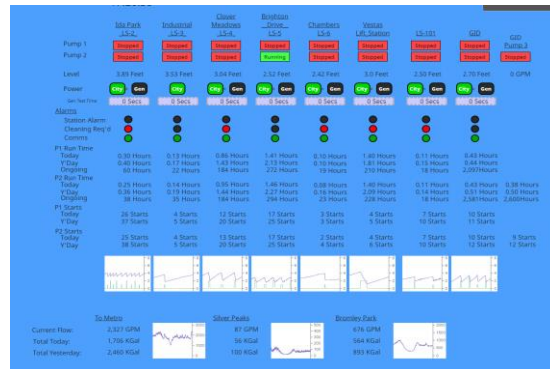
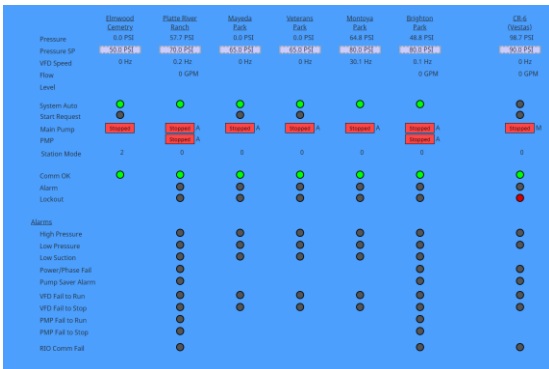
- ✓ 1 Controls System Technician

## Industry Wide Challenges

- ✓ Aging Workforce
- ✓ Regulatory Pressure
- ✓ Technology
- ✓ Public Perception
- ✓ Funding

# Addressing Staffing Challenges

- Refocusing recruitment efforts
- Training and retention initiatives
- Automation and technology



## Safety Improvements

- Fall Protection Replacements
- MSDS to SDS
- SOPs Updates
- Training for Confined Space Protocols and Equipment
- Lockout Tag Out Equipment
- CPR Training
- Updating Safety Signage



# RO Water Treatment Facility





# Water Treatment Plant Update

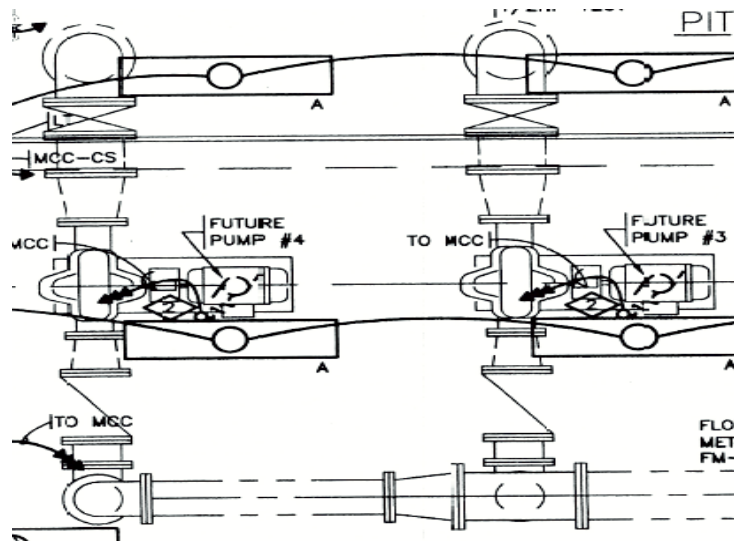


# Future Projects

## 5.0 MG Storage Tank Roof



## North Storage Pumps



## Water Resources

- Staff of three, but soon to be four!
  - ✓ Water Resources Manager
  - ✓ Water Resources Analyst (additional position budgeted in 2025)
  - ✓ Water Resource Field Technician







## Water Resources

- Manage the City's water rights
- Assist developers with water dedication requirements
- Account for all water in City's system daily
- Interface with State regulators
- Operate the City's reservoirs and ditch diversions
- Water supply planning
- Water Resource infrastructure improvements



July 29, 2024

Mr. Corey DeAngelis, Water Division 1 Engineer  
Colorado Division of Water Resources  
810 9<sup>th</sup> Street, 2<sup>nd</sup> Floor  
Greeley, CO 80631

RE: 2023 System Loss Analysis

# Water Resources

## ➤ Recent Projects



Baseline Weir Replacement



Cell 1 Gravity Line Flow Measurement

## Water Resources

### ➤ Future Projects



**Lutz Reservoir Non-Potable System**



**New Storage Reservoir**

## Water Quality Compliance Coordinator

- Drinking Water Regulations are complicated
- EPA has promulgated several new rules recently
  - ✓ PFAS (per and poly-fluoroalkyl substances)
  - ✓ CCR (Consumer Confidence Report) Rule, AKA Drinking Water Quality Report
  - ✓ LCRR (Lead and Copper Rule Revisions)
  - ✓ LCRI (Lead and Copper Rule Improvements) - expected this year

## What is a service line?



*\*If your water meter is located inside the home, the service line is privately-owned to the curb stop. The curb stop is typically located at the property line.*

## Lead Inventory

- Inventory report due to Colorado Department of Public Health and Environment on October 16, 2024, outlining the service line materials for each Brighton address
- Notice to all addresses (owner and occupant) that are considered “unknown material” sent by November 15, 2024
- Lead Service Line Replacement Plan due October 16, 2024

**We currently believe we do not have any lead service lines.**



# Lead Inventory Map

Goes Live October 16, 2024

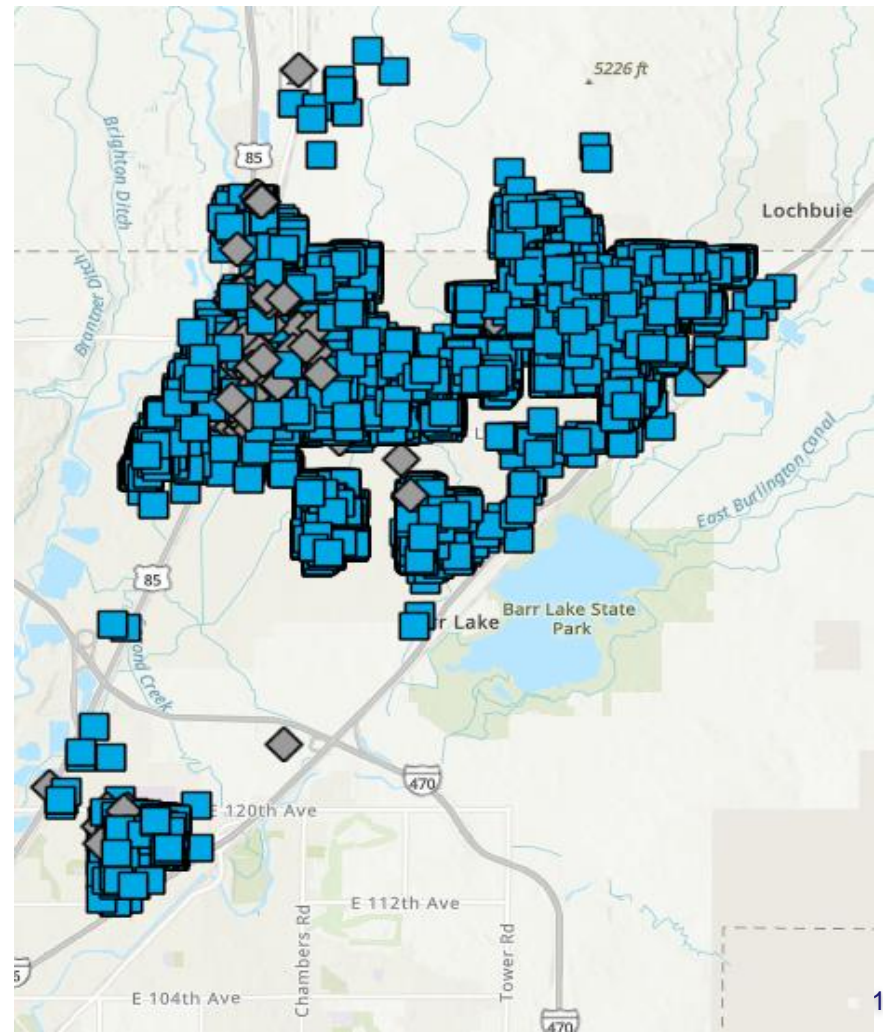
[www.brightonco.gov/lead](http://www.brightonco.gov/lead)

**Legend** ⌵ ✕

Service Line

Public Lead Category

- Lead - Inspection Verified
- ▲ Galvanized Requiring Replacement
- Non-Lead
- ◆ Unknown
- Other



## What does “unknown” mean?

- City currently has about 1,730 addresses where we have not confirmed the material of the service line
- City must confirm service line material of City-owned and customer-owned portions of the water service line
- Homes older than 1960





## How will the City confirm the material of the unknown service lines?

- Core Drilling
- Core Drilling involves using water to excavate a small hole over the service line to determine the material
- City will be required to pothole at least 317 addresses, both on the City-owned portion and the customer-owned portion of the service line

## Next Steps

- City staff have extensive experience and knowledge on the topic
- Staff has and continues to research the best available approach to confirming unknown service line material
- City staff will present options to this Council with a final recommendation for the approach to confirming the unknown service line materials at a future study session.

~Thank you for your time~

Questions?

